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## ABSTRACT

The invention relates to heterocyclic substituted carbonyl derivatives that display selective binding to dopamine D<sub>3</sub> receptors. In another aspect, the invention relates 15 to a method for treating central nervous system disorders associated with the dopamine D<sub>3</sub> receptor activity in a patient in need of such treatment comprising administering to the subject a therapeutically effective amount of said compounds for alleviation of such disorder. The central nervous system disorders that may be treated with these compounds include Psychotic Disorders, Substance Dependence, 20 Substance Abuse, Dyskinetic Disorders (e.g. Parkinson's Disease, Parkinsonism, Neuroleptic-Induced Tardive Dyskinesia, Gilles de la Tourette Syndrome and Huntington's Disease), Dementia, Anxiety Disorders, Sleep Disorders, Circadian Rhythm Disorders and Mood Disorders. The subject invention is also directed towards processes for the preparation of the compounds described herein as well as 25 methods for making and using the compounds as imaging agents for dopamine D<sub>3</sub> receptors.

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